

**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5
77 WEST JACKSON BOULEVARD
CHICAGO, ILLINOIS 60604**

DATE:

SUBJECT: Mid-America Steel Drum Company, Inc.
8570 South Chicago Road, Oak Creek, WI 53154

FROM: Dakota Prentice, Environmental Engineer
Air Enforcement and Compliance Assurance Section (IL/IN)

THRU: Nathan Frank, Chief
Air Enforcement and Compliance Assurance Section (IL/IN)

TO: File

INSPECTION OVERVIEW**Name**

Mid-America Steel Drum Company, Inc.

Location

8570 South Chicago Road, Oak Creek, WI 53154

Inspection Date

December 9, 2013

Attendees

Katharine Owens, EPA, Environmental Engineer
Dakota Prentice, EPA, Environmental Engineer
Scott Swosinski, Mid-America Steel Drum Company, Inc., V.P. of Operations

Company Contact

Scott Swosinski
V.P. of Operations
414.762.1114

Company Overview

Mid-America Steel Drum Company, Inc. ("Mid-America") operates a drum reconditioning facility ("the facility"). The facility receives used drums from various industries and reconditions the drums by either washing the drums or by removing existing coatings with an incinerator and applying new coatings.

Environmental Justice

The EPA uses a nationally consistent environmental justice screening tool (EJSCREEN) to identify areas with potentially disproportionately high environmental and public health burdens. It combines a set of

indicators in the categories of health, environment, and social demographics, to identify, in an analytically rigorous and consistent manner, potential disproportionately and adversely affected areas. According to the EJSCREEN, Mid-America is not located in an EJ area based on the 12 Primary EJ Indexes.

Regulatory Overview

The facility is considered a major source under the Clean Air Act (CAA). Mid-America operates under a Renewal of Part 70 Source Operation Permit, Permit No. 241021220-P10, issued on June 11, 2013, by Wisconsin Department of Natural Resources (WDNR).

The facility is subject to the National Emission Standards for Hazardous Air Pollutants for Surface Coating of Miscellaneous Metal Parts and Products at 40 C.F.R. Part 63, Subpart Mmmm (NESHAP Mmmm).

ARRIVAL AND OPENING CONFERENCE

We (Katharine Owens and Dakota Prentice of EPA) arrived at the Mid-America facility located in Oak Creek, Wisconsin at approximately 9:30 AM on December 9, 2013. We notified a receptionist of our presence and requested to speak to someone regarding environmental compliance. We were met by Scott Swosinski, V.P. of Operations for the facility, who directed us to a conference room. We stated the purpose of our visit was to determine the facility's compliance with the CAA. We showed him our credentials and started the opening conference.

We told Mr. Swosinski that we would like a process based overview of operations at the facility, focusing on air emissions and pollution control equipment, and a plant tour. We told him that we would be checking compliance with the facility's air permit issued by WDNR. We informed him that we would end the inspection with a closing conference. We explained that if we discussed anything Mid-America considered confidential business information (CBI), they should let us know and we would treat it as such. No CBI was collected during the inspection.

Mr. Swosinski provided background information on facility operations. Mid-America started operations at the facility in 1975 to refurbish 55-gallon steel drums. Prior to Mid-America, other business occupied the property. The facility currently has approximately 75 employees and operates on one shift from 6:00 AM to 8:30 PM.

Process Overview

Steel drum refurbishing at the facility starts with the delivery of 55-gallon steel drums via truck. These drums are classified as either open head drums or tight head drums. Open head drums have had the top of the drum removed. Tight head drums have the tops in place and the interior is only accessible through the bung opening. The drums are brought to the facility in what Mr. Swosinski described as "RCRA empty." "RCRA empty" was described as the drum having less than one inch of material remaining in the drum.

Tight head drums are taken to a washing line where the interiors of the drums are washed with hot water and caustic soda through the bung opening. The drums are then manually inspected. If the interior was cleaned in the wash cycle, reconditioning of the drum is complete. If the interior was not cleaned satisfactorily, the top of the drum is removed to create an open head drum. The drum is then moved to the open head drum reconditioning line.

Open head drums are tipped upside down and placed on a conveyer. The conveyer moves the drums

through a drum furnace. At the drum furnace, paints/coatings, labels, and residual material within the drum is incinerated. The drum furnace operates at a rate of approximately 200 drums per hour. Emissions from the drum furnace are controlled by a thermal oxidizer. The thermal oxidizer has four natural gas burners and operates at 1700 °F or 1750 °F (Mr. Swosinski was unsure of the setpoint). The temperature of the thermal oxidizer is recorded on a circle chart and an alarm is in place to alert facility personnel if the temperature drops below the setpoint.

After the drum furnace, the drums are moved to a shot blast unit. The shot blast unit uses metal shot to remove ash residual remaining on the drums from the drum furnace and to prepare the drums for the coating processes that follow. If needed, the drums go to a reshaping unit to remove significant deformities in the drum.

The facility has two coating lines, one line for exterior coating and one line for interior coating. Mr. Swosinski stated that exterior coatings are water based and do not contain any volatile organic compounds (VOCs) or hazardous air pollutants (HAPs). The interior coating line uses one coating product. This coating product was described by Mr. Swosinski as “3.5 compliant” as the coating has less than 3.5 pounds of VOCs per gallon of coating. Mr. Swosinski was not entirely sure how the facility complied with NESHAP MMMM. Mr. Swosinski stated that the interior coating is used for rust and chemical resistance and is also “FDA compliant.”

After the coatings are applied, the drums move to a curing unit. The curing unit operates at approximately 425 - 475 °F and uses heat to dry the coatings on the drums. The drums spend approximately seven minutes in the curing unit. Emissions from the curing unit are not controlled.

After curing the drums are loaded back onto trucks for delivery to Mid-America’s customers.

SITE TOUR

We started the tour of the facility at approximately 10:00 AM. The facility tour was provided by Mr. Swosinski. We were shown the entire drum refurbishing process. At the tight head line we were shown drum washing and inspection. At the open head line we were shown the drum furnace, which was operating at approximately 1756 °F. We also witnessed interior and exterior coating lines while in operation. During the site tour, Mr. Swosinski stated that the drums are 18 gauge steel or lighter.

CLOSING CONFERENCE

Following completion of the plant tour, we returned to the conference room for a closing conference. We told Mr. Swosinski that we may follow-up the inspection with a CAA Section 114 Information Request, and that he could contact us directly for a copy of the inspection report.

We requested and were provided with a copy of the summary of the most recent performance test for the thermal oxidizer (2007), a copy of the MSDS for the solvent based interior coating, and a facility diagram. The performance test indicated that the thermal oxidizer was not in compliance with particulate matter emission limits. Mr. Swosinski acknowledged the test result but stated that this exceedance had been dealt with through WDNR. He was not sure exactly how the exceedance was resolved. We confirmed that none of the materials or information he shared with us should be considered CBI. We thanked him for his time and left the facility at approximately 11:00 AM.

Records Obtained

Drum Reclamation Furnace Performance Test Summary
MSDS for Solvent-Based Coating
Facility Diagram

Standard bcc's: Official file copy w/attachment(s)

Other bcc's: Dakota Prentice (AE-17J)
Katharine Owens (AE-17J)

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